EXHIBIT E

'049 Patent	Claim Elements	NCT's Mapping	Inadequacies of NCT's Claim Chart
Claim 1	In a network of digital computers that includes a first plurality of Network Distributed Cache ("NDC") sites, each NDC site including an NDC that has an NDC buffer, a method for projecting images of a stored dataset from an NDC server terminator site into a second plurality of NDC client terminator sites in response to requests to concurrently access such stored dataset transmitted from a third plurality of client sites respectively to the second plurality of NDC client terminator sites, the method comprising the steps of:	CacheFlow infringes this claim under 35 U.S.C. § 271(b) and/or (c). CacheFlow 700 accelerators are combined in a computer network of its customers, such as internet service providers, or network providers, or network providers-such as Akamai. Operation of the CacheFlow 700 accelerator by CacheFlow's customers in their networks performs the claimed functions as described below and constitute infringement under 35 U.S.C. § 271(a). The computer network- such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446, Figure 3 on CF 007447, the Figure on CF 005965 to CF 005966 and Figure 3 on CF 007447, the Figure 3 on CF 007423- comprises two or more computers acting as client sites, which make concurrent requests for data from two or more client accelerators. The computer network also includes one or more server accelerators-	NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons. The preamble identifies a network of digital computers, including: An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a SA 700 can be configured to be a NDC site. There is no support that CacheFlow software and hardware create an NDC. NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The SA 700 never stores the "stored data" that is always on the web server. NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network. NCT misrepresents what the documents they rely on state: CF007493 does not provide a description of a processor or memory within a SA 700. CF007490-3 does not show the memory of the SA 700 being allocated as a cache.

NDC server terminator site-such as a CacheFlow 700 accelerator (See CF 007456). The client accelerators and the CacheFlow 700 accelerator include a processor and a memory (See CF 007493) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 007490-CF 007493). The accelerators further include computer programs, which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a client accelerator receiving a request for data, if its buffers have such data, the client accelerator transmits the requested data back to the computer- client site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the client accelerator do not have the requested data, the client accelerator transmits a request to the CacheFlow 700 accelerator acting as a server terminator site. If the buffers within the CacheFlow 700 accelerator have such data, the server accelerator transmits the requested data back to the client

accelerator. If not, the CacheFlow 700 accelerator accesses the server and obtains a copy (i.e., projected image) of the requested data. After obtaining a copy of the requested data" each shared cache, including the CacheFlow 700 accelerator, can subsequently transmit the data to one or more computers within the network.

"The CacheFlow
Server Accelerator 700
Series, an integral
component of the
CacheFlow cIQ
Content Delivery
Architecture, is the only
solution specifically
built to offload Web
servers from content
delivery tasks." CF
007490.

"The SA-700 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 007491.

" A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

- "...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See a/so CF 007447.
- " An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.

"The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio and a built-in Secure Sockets

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	Layer (SSL) encryption/ decryption processor. This processor can manage 10 to 40 times more secure sessions than a standard Web server, allowing the SA- 700 to accelerate the delivery of both public (HTTP) and private (HTTPS) content." CF 007491. See also CF 009235. See CF 007493 and 009235 (specifying the different disk drives for each of the three models of the 700 Series accelerators). "The SA- 700's system software, called cIQ CacheOS TM Server Edition, is expressly tuned for the workload	
	of a high-traffic Web site." CF 007491. See a/so CF 009235. See CF 007493 and 009235 (specifying the size of the RAM for each of the three models of the 700 Series accelerators).	
	Series accelerators).	
(a) the NDC receiving the request to access data in the stored dataset;	The shared cache (NDC) of the CacheFlow 700 accelerator receives a request to access data in a stored dataset. "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators	NCT has not identified the structure of an NDC within the SA 700. NCT has not shown where or how the SA 700 is an NDC Server Terminator Site. NCT is under the false belief that the "shared cache" referred to in CacheFlow marketing literature is an NDC. However, the literature upon which they base their mapping on, clearly shows that the SA 700 is a single cache shared by multiple servers. The shared cache is not a part of the SA 700, but is the entire SA 700.

	serve up content that the web server would otherwise be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456. The 700 Series incorporates the same patent-pending CacheOS TM software as the CA-600 series. "At a step 211, one of the client devices 120 sends a message to its associated leaf cache 111 requesting a selected web object 133." CF 009277.	
(b) the NDC checking the NDC buffer at this NDC site to determine if a projected image of data requested from the stored dataset is already present there;	The shared cache (NDC) of the 700 accelerator checks its memory (NDC buffer) to determine whether it has a copy (projected image) of the requested data. "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965. " A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators	NCT has not provided any evidence that that the SA 700 is an NDC Server Terminator Site. Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the SA700, where an NDC buffer exists within the SA 700, or where a projected image exists within the SA 700.

serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

The 700 Series incorporates the same patent-pending CacheOSTM software as the CA-600 series.

"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112. ...If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.

NCT has not shown where or how the SA 700 is an NDC Server Terminator Site.

Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the SA700, where an NDC buffer exists within the SA 700, or where a projected image exists within the SA 700.

Furthermore, NCT has not identified structure within the accused device that transmits a request downstream to another SA 700.

Nor does NCT identify a structure within the accused device for transmitting to another NDC site closer to the NDC server terminator site for the stored dataset.

(c) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if the NDC site receiving the request is not the NDC server terminator site for the stored dataset, the NDC of this NDC site transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the stored dataset than the present NDC site:

If the memory (NDC buffer) of the CacheFlow 700 accelerator does not contain a copy (projected image) of all the requested data. and if this accelerator (NDC site) is not the server accelerator (NDC server terminator site) for the stored dataset, the shared cache (NDC) for this site transmits a request for the requested data downstream to another accelerator (NDC site) that is closer to server accelerator (NDC server terminator site) for the dataset or to the server accelerator (NDC server terminator site).

"ciQ Server Accelerators accelerate and scale web farn1s by serving up to 95% of http and https content without taxing backend servers." CF 005965.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See a/so CF 007447.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly. ..By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

The 700 Series incorporates the same patent-pending CacheOSTM software as the CA-600 series.

"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage

	112,because there has been a leaf cache miss At a step 221, similar to step 211, the leaf cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.	
(d) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if the NDC site receiving the request is the NDC server terminator site for the stored dataset, the NDC of the NDC server terminator site accessing the stored dataset to project an image of the requested data into the NDC buffer of the NDC server terminator site;	The shared cache (NDC) of the 700 accelerator, acting as a server terminator site, accesses the stored dataset to project a copy (projected image) of the requested data into its memory (NDC buffer). "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965. "caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447. "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users.	NCT does not identify any structure within the SA 700 that can store the "stored dataset" as defined in the asserted patent.

Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

The 700 Series incorporates the same patent-pending CacheOSTM software as the CA-600 series.

"At a step 223, similar to step 213, the root cache 111 determines if the web object 133 is present in its memory or storage 112. In a preferred embodiment, the root cache 111 makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230.

At a flow point 230, the root cache 111 is unable to transmit the web object 133 from its memory or storage 112 ...because there has a been a root cache miss...

At a step 231, similar to step 211, the root cache sends a message to the

	indicated server device	
	130 requesting the web	
	object 133.	
	At a step 232, the server device 130 transmits the web object 133 to the root cache 111." CF 009278- 009279.	
(e) repeating the steps (a) through (d) until the NDC buffer of the downstream NDC site receiving the request contains a projected image of all requested data;	The shared cache (NDC) of the CacheFlow 700 accelerator, acting as a server terminator site for the stored dataset, continues to check its memory (NDC buffer) to determine whether it contains a copy (projected image) of all requested data, and if such memory does not contain a projected image of all data requested from the stored dataset, the shared cache (NDC) of the CacheFlow 700 accelerator continues to accesses the stored dataset until its memory buffer receives a copy of all the requested data. "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965. "A reverse proxy or server accelerator, such as a CacheFlow	NCT does not identify any structure within the SA 700 that stores the "stored dataset" as defined in the asserted patent.
	Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators	

	T	
	serve up content that the web server would otherwise be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	
	"caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See a/so CF 007447.	
(f) each successive NDC site, having obtained a projected image of all the requested data, returning the requested data upstream to the NDC site from which the NDC site received the request until the requested data arrives at the NDC client terminator site, each NDC site that returns data upstream to the requesting NDC site retaining a copy of the returned data that the returning NDC site may subsequently transmit to an NDC site other than the NDC site to which the returning NDC site to which the returning NDC site first returned the data, whereby images of the stored dataset may be projected concurrently from a single NDC site	After the CacheFlow 700 accelerator, acting as an NDC server terminator site, obtains a copy (projected image) of all the requested data, the shared cache (NDC) of that CacheFlow 700 accelerator sends the data upstream, either directly or through intermediate NDC sites (such as other CacheFlow 700 accelerators), to the client accelerator (NDC client terminator site). The CacheFlow 700 accelerator (NDC server terminator site), and any intermediate NDC sites (accelerators), retain a copy of the returned data so that it (they) may subsequently and concurrently transmit a copy of such data to	NCT does not identify any structure within the SA 700 that can return requested data upstream to another NDC site. Nor has NCT identified any structure within the SA 700 that can retain a copy of the returned data. NCT has not identified any structure in the SA 700 for concurrently projecting images into a plurality of client terminator sites.

into the second	two or more client	
plurality of NDC client	accelerators (NDC	
terminator sites; and	client terminator sites).	
terrimater entee, and		
	"ciQ Server	
	Accelerators accelerate	
	and scale web farms	
	by serving up to 95% of	
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	servers." CF 005965.	
	"A reverse proxy or	
	server accelerator,	
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	Server Accelerator, is a	
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	delivery of content to	
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	_	
	shows a hierarchical	
	deployment of	
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	beginning with the	
	POPs closest to the	
	users and working	
	upstream though	
	aggregation sites to the	
	provider's central site."	
	CF 007472. See also	
	CF 007447.	
	31 307 177.	
(a) the NDC -1:t	Linea venekirin vitra	
(g) the NDC client	Upon receiving the	
terminator site, upon	requested data. the	
receiving the requested	client accelerator (NDC	
data, returning the	client terminator site),	
	such as a CacheFlow	
requested data to the		
client site that	600 accelerator, sends	1

	requested access to the stored dataset.	the data to the client that requested it. "By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	
		007 100.	
Claim 16	A network of digital computers that includes a first plurality of client sites which request access to a stored dataset that is stored at a location that can be accessed through the network, the network comprising: a second plurality of NDC sites, the stored dataset whose access is requested by the client sites being stored at an NDC server terminator site, a request from the client sites for access to the stored dataset being received by a third plurality of NDC client terminator sites, each NDC site including:	CacheFlow infringes this claim under 35 U.S.C. § 271(b) and/or (c). CacheFlow 700 accelerators are combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers-such as Akamai. Inclusion and operation of the CacheFlow 700 accelerator by CacheFlow's customers in their networks performs the claimed functions as described below and constitute infringement under 35 U.S.C. § 271(a). The computer network- such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007446, Figure 3 on CF 007447, the Figure on CF 005965 to CF 005966 and Figure 3 on CF 007423- comprises two or more computers acting as client sites, which make concurrent requests for data from two or more client accelerators. The computer network also	NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons. The preamble identifies a network of digital computers, including: An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a SA 700 can be configured to be a NDC site. There is no support that CacheFlow software and hardware create an NDC. NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The SA 700 never stores the "stored data" that is always on the web server. NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network. NCT misrepresents what the documents they rely on state: CF007493 does not provide a description of a processor or memory within a SA 700. CF007490-3 does not show the memory of the SA 700 being allocated as a cache.

includes one or more server accelerators-NDC server terminator site-such as a CacheFlow 700 accelerator (See CF 007456). The client accelerators and the CacheFlow 700 accelerator include a processor and a memory (See CF 007493) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 007490-CF 007493). The accelerators further include computer programs, which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a client accelerator receiving a request for data, if its buffers have such data, the client accelerator transmits the requested data back to the computer-client site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the client accelerator do not have the requested data, the client accelerator transmits a request to the CacheFlow 700 accelerator acting as a server terminator site. If the buffers within the CacheFlow 700 accelerator have such data, the server accelerator transmits

the requested data back to the client accelerator. If not, the CacheFlow 700 accelerator accesses the server and obtains a copy (i.e., projected image) of the requested data. After obtaining a copy of the requested data, each shared cache, including the CacheFlow 700 accelerator, can subsequently transmit the data to one or more computers within the network.

"The CacheFlow
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007490.

"The SA- 700 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 007491.

" A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See a/so CF 007447 "An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.

"The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio and a built-in Secure Sockets

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	Layer (SSL) encryption/ decryption processor. This processor can manage 10 to 40 times more secure sessions than a standard Web server, allowing the SA- 700 to accelerate the delivery of both public (HTTP) and private (HTTPS) content." CF 007491. See also CF 009235. See CF 007493 and	
	009235 (specifying the different disk drives for each of the three models of the 700 Series accelerators).	
	"The SA- 700's system software, called clQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See a/so CF 009235.	
	See CF 007493 and 009235 (specifying the size of the RAM for each of the three models of the 700 Series accelerators).	
(a) an NDC that has an NDC buffer;	A CacheFlow 700 accelerator has a shared cache (NDC) includes a memory, which comprises a buffer, wherein copies of cached data may be stored and which is checked to determine whether cached data is stored therein.	NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons. NCT has not shown that buffers exist within the SA 700. Thus, without identifying any buffer in the SA 700, NCT's chart does not map a buffer within the SA 700 to an NDC buffer. Determining what an NDC buffer includes is a claim construction issue, since an NDC
	"The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio" CF 007491. See a/so CF 009235.	buffer includes a channel, which the SA 700 does not have. Furthermore, NCT asserts that the RAM contained within the SA 700 is the NDC buffer which stores a projected image, however, the RAM does not store cached data,

	See CF 007493 and 009235 (specifying the memory size for each of the three models of the 700 Series accelerators).	it is a magnetic disk within the SA 700 that caches.
(b) means for the NDC to receive the request to access the stored dataset;	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the shared cache (NDC) of the CacheFlow 700 accelerator performs the claimed function of receiving a request to access a stored dataset. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to intercept routine 102 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "The SA- 700's system software, called clQ CacheOS™ Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See a/so CF 009235. "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedlyBy placing	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the intercept routine 102 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

	a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	
(c) means for the NDC to check the NDC buffer at this NDC site to determine if a projected image of data requested from the stored dataset is already present there, wherein:	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the shared cache (NDC) of the CacheFlow 700 accelerator perfon11s the claimed function of checking its memory (NDC buffer) to determine whether the memory has a copy (projected image) of the requested data. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to buffer search routine 126 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965. "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

	to regenerate repeatedlyBy placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456. "The SA- 700's system software, called clQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235. The 700 Series incorporates the same patent-pending CacheOS TM software as in the CA-600 Series.	
	"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.	
(c)(i) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if this NDC site is not the NDC server terminator site for the stored dataset, the NDC includes means for transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the stored dataset than the present NDC site;	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the shared cache (NDC) CacheFlow 700 accelerator performs the claimed function of transmitting a request for data downstream to another NDC site. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to request director routine 144 as disclosed in U.S. Patent No. 5,611,049,	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the request director routine 144 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

for performing this claimed function.

"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"The SA- 700's system software, called clQ CacheOSTM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See

also CF 009235. The 700 Series incorporates the same patent-pending CacheOSTM software as the CA-600 series. "At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112...because there has been a leaf cache miss... At a step 221, similar to step 211, the leaf cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278. (c)(ii) if the NDC buffer This claim element is This element is a means plus of this NDC site does subject to interpretation function claim element that NCT not contain a projected under 35 U.S.C. § 112, maps to CacheFlow's CacheOS image of all data software. NCT has not shown any requested from the corresponding physical structure to stored dataset, and if the "means" stated in the asserted The shared cache this NDC site is the (NDC) of the claim, but instead indicates that NDC server terminator CacheFlow 700 the means is the file system accelerator performs interface routines112 described in site for the stored dataset, the NDC acting as the server the asserted patents. NCT fails to accelerator (NDC satisfy the specificity requirements including means for of L.R. 3-1, without identifying what accessing the stored server terminator site) subroutine within the CacheOS dataset to project an the claimed function of image of the requested accessing the stored software performs the claimed data into the buffer of dataset to project an function. this NDC; and image of the requested data into its memory (NDC buffer). This site incorporates software. the same as or equivalent to file system interface routines 112 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "ciQ Server Accelerators accelerate

and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See a/so CF 007447.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"The SA- 700's system software, called clQ CacheOSTM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See a/so CF 009235.

The 700 Series incorporates the same patent-pending

 1	Thá	
	CacheOS [™] software	
	as in the CA-600	
	Series.	
	"At a step 223, similar	
	to step 213, the root	
	cache 111 determines	
	if the web object 133 is	
	present in its memory	
	or storage 112. In a	
	preferred embodiment,	
	the root cache 111	
	makes this	
	determination in	
	response to the URL	
	for the selected web	
	object 133 included in	
	the request from the	
	client device 120. If the	
	web object 133 is	
	present, the method	
	200 proceeds with the	
	next step. If the web	
	object 13 is not	
	present, the method	
	200 proceeds with the	
	flow point 230.	
	At a flow point 230, the	
	root cache 111 is	
	unable to transmit the	
	web object 133 from its	
	memory or storage 112	
	because there has a	
	been a root cache	
	miss	
	At a step 231, similar to	
	step 211, the root	
	cache sends a	
	message to the	
	indicated server device	
	130 requesting the web	
	object 133.	
	A	
	At a step 232, the	
	server device 130	
	transmits the web	
	object 133 to the	
	root cache III." CF	
	009278-009279.	
(c)(iii) if the NDC buffer	This claim element is	This element is a means plus
of an NDC site	subject to interpretation	function claim element that NCT
contains a projected	under 35 U.S.C. § 112,	maps to CacheFlow's CacheOS
image of all requested	¶6.	software. NCT has not shown any
 mage of all requested	I ∥ √ .	John and Hot Had Hot Shown ally

data, the NDC including means for returning the data requested from this NDC site upstream to the NDC site from which this NDC site received the request, whereby through a succession of such returns of data from one NDC site to the next upstream NDC site the requested data ultimately arrives at the NDC client terminator site, each NDC site that returns data upstream to the requesting NDC site retaining a copy of the returned data that the returning NDC site may subsequently transmit to an NDC site other than the NDC site to which the returning NDC site first returned the data, whereby images of the stored dataset may be projected concurrently from a single NDC site into the third plurality of NDC client terminator sites: and

The software of the shared cache (NDC) of the CacheFlow 700 accelerator performs the claimed function of returning the requested data to the upstream accelerator (NDC site) that requested the data. The CacheFlow 700 accelerator incorporates software. the same as or equivalent to the buffer search routine 126 and client intercept routines 102 or the buffer search routine 126 and server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.

The memory (NDC buffer) and software of the shared cache (NDC) of the CacheF1ow 700 accelerator performs the claimed function of retaining a copy of the returned data. The CacheF1ow 700 accelerator includes a pool 128 of buffers 129 and incorporates software, the same as or equivalent to the buffer search routine 126 as disclosed in U.S. Patent No. 5.611.049. for performing this claimed function.

"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965. corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126, client intercept routines 102, or the buffer search routine 126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

"caches will be
deployed across the
network. Figure 3
shows a hierarchical
deployment of
CacheFlow products,
beginning with the
POPs closest to the
users and working
upstream though
aggregation sites to the
provider's central site."
CF 007472. See also
CF 007447.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"The SA- 700's system software, called clQ CacheOSTM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See a/so CF 009235.

	(d) means for the NDC client terminator site to return the requested data to the client site that requested access to the stored dataset.	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the shared cache of the client accelerator (NDC client terminator site) performs the claimed function of returning the requested data to the client site. The accelerator sites incorporate software, the same as or equivalent to the client intercept routines 102 or server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	NCT makes no showing that the NDC is a shared cache of the SA 700. This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the client intercept routines 102, or the buffer search routine126, and server interface routines 104., described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.
'914 Patent Claim 1	In a network of digital computers that includes a plurality of Network Distributed Cache ("NDC") sites, each NDC site including an NDC that has an NDC buffer, a method for projecting an image of a stored dataset from an NDC server terminator site into an NDC client terminator site in response to a request to access such dataset transmitted from a client site to the NDC client terminator site, the method comprising the steps of:	CacheFlow infringes this claim under 35 U.S.C. § 271(b) and/or (c). A Cache Flow 700 accelerator is combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers-such as Akamai. Operation of the CacheFlow 700 accelerator by CacheFlow's customers in their networks performs the claimed functions as	NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons. The preamble identifies a network of digital computers, including: An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a SA 700 can be configured to be a NDC site. There is no support that CacheFlow software and hardware create an NDC. NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found

described below and constitute infringement under 35 U.S.C. § 271(a). The computer network- such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446, Figure 3 on CF 007447, the Figure on CF 005965 to CF 005966 and Figure 3 on CF 007423- comprises a computer acting as a client site, which makes a request for data from a client accelerator. The computer network also includes a server accelerators-an NDC server terminator sitesuch as a CacheFlow 700 accelerator (See CF 007456). The client accelerator and the CacheFlow 700 accelerator include a processor and a memory (See CF 007493) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 007490-CF 007493). The accelerators further include computer programs, which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a client accelerator receiving a request for data, if its buffers have such data, the client accelerator transmits the requested on a web server. The SA 700 never stores the "stored data" that is always on the web server.

NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.

NCT misrepresents what the documents they rely on state: CF007493 does not provide a description of a processor or memory within a SA 700.

CF007490-3 does not show the memory of the SA 700 being allocated as a cache.

data back to the computer- client site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the client accelerator do not have the requested data, the client accelerator transmits a request to the CacheFlow 700 accelerator acting as a server terminator site. If the buffers within the CacheFlow 700 accelerator have such data, the server accelerator transmits the requested data back to the client accelerator. If not, the CacheFlow 700 accelerator accesses the server and obtains a copy (i.e., projected image) of the requested data. After obtaining a copy of the requested data, each shared cache, including the CacheFlow 700 accelerator, can subsequently transmit the data to one or more computers within the network.

"The CacheFlow Server Accelerator 700 Series, an integral component of the CacheFlow clQTM Content Delivery Architecture, is the only solution specifically built to offload Web servers from content delivery tasks." CF 007490.

"The SA- 700 services up to 95% of a site's

inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 007491.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447.

"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.

"The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAMto-disk ratio and a builtin Secure Sockets Layer (SSL) encryption/ decryption processor. This processor can manage 10 to 40 times more secure sessions than a standard Web server. allowing the SA-700 to accelerate the delivery of both public (HTTP) and private (HTTPS) content." CF 007491. See a/so CF 009235. See CF 007493 and 009235 (specifying the different disk drives for each of the three models of the 700 Series accelerators).

"The SA- 700's system software, called clQ CacheOS™ Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235.

See CF 007493 and 009235 (specifying the size of the RAM for each of the three

	models of the 700	
	Series accelerators).	
(a) the NDC receiving the request to access data in the stored dataset;	The shared cache (NDC) of the CacheFlow 700 accelerator receives a request to access data in a stored dataset.	NCT has not identified the structure of an NDC within the SA 700. NCT has not shown where or how the SA 700 is an NDC Server
	"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	NCT is under the false belief that the "shared cache" referred to in CacheFlow marketing literature is an NDC. However, the literature upon which they base this mapping on, clearly shows that the SA 700 is a single cache shared by multiple servers. The shared cache is not a part of the SA 700, but is the entire SA 700.
(b) the NDC checking the NDC buffer at this NDC site to determine if a projected image of data requested from the dataset is already present there;	The shared cache (NDC) of the 700 accelerator checks its memory (NDC buffer) to determine whether it has a copy (projected image) of the requested data. "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965. "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers	NCT has not provided any evidence that that the SA 700 is an NDC Server Terminator Site. NCT has not shown that the SA 700 is an NDC Server Terminator Site, that it has an NDC, that is has an NDC buffer, or that it has a projected image. Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the SA700, where an NDC buffer exists within the SA 700, or where a projected image exists within the SA 700.

	install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	
	The 700 Series Incorporates the same patent-pending CacheOS TM software as the CA-600 series. "At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.	
(c) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if the NDC site receiving the request is not the NDC server terminator site for the dataset, the NDC of this NDC site transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the dataset than the present NDC site;	If the memory (NDC buffer) of the CacheFlow 700 accelerator does not contain a copy (projected image) of all the requested data, and if this accelerator (NDC site) is not the server accelerator (NDC server terminator site) for the stored dataset, the shared cache (NDC) for this site transmits a request for the requested data downstream to another accelerator (NDC site) that is closer to server accelerator (NDC server terminator site) for the dataset or to the server accelerator	NCT has not shown where or how the SA 700 is an NDC Server Terminator Site. Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the SA700, where an NDC buffer exists within the SA 700, or where a projected image exists within the SA 700. Furthermore, NCT has not identified structure within the accused device that transmits a request downstream to another SA 700. Nor does NCT identify a structure within the accused device for transmitting to another NDC site closer to the NDC server

(NDC server terminator site).

"ciQ Server Accelerators accelerate and scale web farn1s by serving up to 95% of http and https content without taxing backend servers." CF 005965.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of .CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447.

"A reverse proxy or server accelerator. such as a CacheFlow Server Accelerator, is a shared cache that web content providers' install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

The 700 Series incorporates the same patent-pending CacheOSTM software as the CA-600 series.

" At a flow point

terminator site for the stored dataset.

NCT has not shown that the SA 700 is an NDC Server Terminator Site, that it has an NDC, that is has an NDC buffer, or that it has a projected image. Furthermore, NCT has not shown that the accused device transmits a request downstream. Nor does NCT show transmitting to another NDC site closer to the NDC server terminator site for the stored dataset.

	1	
	220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112,because there has been a leaf cache miss At a step 221, similar to step 211, the leaf cache 111 sends a message to the root cache 111 requesting the web object 133." CF	
(d) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if the NDC site receiving the request is the NDC server terminator site for the dataset, the NDC of this NDC site accessing the stored dataset to project an image of the requested data into its NDC buffer;	object 133." CF 009278. The shared cache (NDC) of the 700 accelerator, acting as a server terminator site, accesses the stored dataset to project a copy (projected image) of the requested data into its memory (NDC buffer). "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965. "caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447. "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a	NCT does not identify any structure within the SA 700 that can store the "stored dataset" as defined in the asserted patent.

shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate, repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

The 700 Series incorporates the same patent-pending CacheOSTM software as the CA-600 series.

"At a step 223, similar to step 213, the root cache 111 determines if the web object 133 is present in its memory or storage 112. In a preferred embodiment, the root cache 111 makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230.

At a flow point 230, the root cache 111 is unable to transmit the web object 133 from its memory or storage 112 ...because there has a been a root cache

	miss	
	At a step 231, similar to step 211, the root cache sends a message to the indicated server device 130 requesting the web object 133.	
	At a step 232, the server device 130 transmits the web object 133 to the root cache III." CF 009278- 009279.	
(e) repeating the steps (a) through (d) until the NDC buffer of the downstream NDC site receiving the request contains a projected image of all requested data;	The shared cache (NDC) of the CacheFlow 700 accelerator, acting as a server terminator site for the stored dataset, continues to check its memory (NDC buffer) to determine whether it contains a copy (projected image) of all requested data, and if such memory does not contain a projected image of all data requested from the stored dataset, the shared cache (NDC) of the CacheFlow 700 accelerator continues to accesses the stored dataset until its memory buffer receives a copy of all the requested data. "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965. "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web	NCT does not identify any structure within the SA 700 that stores the "stored dataset" as defined in the asserted patent.

	content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456. "caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See a/so CF 007447.	
(f) each successive NDC site, having obtained a projected image of all the requested data, returning data requested from it upstream to the NDC site from which it received the request until the requested data arrives at the NDC client terminator site; and	After the CacheFlow 700 accelerator, acting as an NDC server terminator site, obtains a copy (projected image) of all the requested data, the shared cache (NDC) of that CacheFlow 700 accelerator sends the data upstream, either directly or through intermediate NDC sites (such as other CacheFlow 700 accelerators), to the client accelerator (NDC client	NCT does not identify any structure within the SA 700 that can return requested data upstream to another NDC site. Nor has NCT identified any structure within the SA 700 that can retain a copy of the returned data. NCT has not identified any structure in the SA 700 for concurrently projecting images into a plurality of client terminator sites.

terminator site). The CacheFlow 700 accelerator (NDC server terminator site), and any intermediate NDC sites (accelerators), retain a copy of the returned data so that it (they) may subsequently and concurrently transmit a copy of such data to two or more client accelerators (NDC client terminator sites).

"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the

	(g) the NDC client terminator site, upon receiving the requested data, returning the requested data to the client site.	POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447. Upon receiving the requested data, the client accelerator (NDC client terminator site), such as a CacheFlow 600 accelerator, sends the data to the client that requested it. "By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	
Claim 9	A network of digital computers that includes a client site which requests access to a dataset that is stored at a location that can be accessed through the network, the network comprising:	CacheFlow infringes this claim under 35 U.S.C. §271(b) and/or (c). A CacheFlow 700 accelerator is combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers-such as Akamai. Inclusion and operation of the CacheFlow 700 accelerator by CacheFlow's customers in their networks performs the claimed functions as described below and constitute infringement under 35 V.S.C. § 271(a). The computer network- such as those shown in Figure 3 on page CF 005949,	NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons. The preamble identifies a network of digital computers, including: An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a SA 700 can be configured to be a NDC site. There is no support that CacheFlow software and hardware create an NDC. NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The SA 700 never stores the "stored data" that is always on the web server. NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through

Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446, Figure 3 on CF 007447, the Figure on CF 005965 to CF 005966 and Figure 3 on CF 007423- comprises a computer acting as a client site, which makes a request for data from a client accelerator. The computer network also includes a server accelerators-an NDC server terminator sitesuch as a CacheFlow 700 accelerator (See CF 007456). The client accelerator and the CacheFlow 700 accelerator include a processor and a memory (See CF 007493) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 007490-CF 007493). The accelerators further include computer programs, which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a client accelerator receiving a request for data, if its buffers have such data, the client accelerator transmits the requested data back to the computerclient site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF

L4 switches and Routers, not directly to the network.

NCT misrepresents what the documents they rely on state: CF007493 does not provide a description of a processor or memory within a SA 700.

CF007490-3 does not show the memory of the SA 700 being allocated as a cache.

007456). Otherwise, if the buffers within the client accelerator do not have the requested data, the client accelerator transmits a request to the CacheFlow 700 accelerator acting as a server terminator site. If the buffers within the CacheFlow 700 accelerator have such data. the server accelerator transmits the requested data back to the client accelerator. If not, the CacheFlow 700 accelerator accesses the server and obtains a copy (i.e., projected image) of the requested data. After obtaining a copy of the requested data, each shared cache, including the CacheFlow 700 accelerator, can subsequently transmit the data to one or more computers within the network.

"The CacheFlow Server Accelerator 700 Series, an integral component of the CacheFlow clQ TM Content Delivery Architecture, is the only solution specifically built to offload Web servers from content delivery tasks." CF 007490.

"The SA- 700 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver

both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 007491.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly. ..By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447.

"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the

	requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097. The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio and a built-in Secure Sockets Layer (SSL) encryption! decryption processor. This processor can manage 10 to 40 times more secure sessions than a standard Web server, allowing the SA- 700 to accelerate the delivery of both public (HTTP) and private (HTTPS) content." CF 007491. See a/so CF 009235. See CF 007493 and 009235 (specifying the different disk drives for each of the three models of the 700	
	different disk drives for each of the three models of the 700	
	"The SA- 700's system software, called cIQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See a/so CF 009235.	
	See CF 007493 and 009235 (specifying the size of the RAM for each of the three models of the 700 Series accelerators).	
a plurality of NDC sites, the dataset	The computer network- such as those shown in	There is no support for the assertion that a SA 700 can be

whose access is requested by the client site being stored at an NDC server terminator site, a request from the client site for access to the dataset being received by an NDC client terminator site, each NDC site including:

Figure 3 on page CF 005949. Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446, Figure 3 on CF 007447, the Figure on CF 005965 to CF 005966 and Figure 3 on CF 007423comprises a computer acting as a client site. which makes a request for data from a client accelerator. The computer network also includes a server accelerators-an NDC server terminator sitesuch as a CacheFlow 700 accelerator (See CF 007456). The client accelerator and the CacheFlow 700 accelerator include a processor and a memory (See CF 007493) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 007490-CF 007493). The accelerators further include computer programs, which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a client accelerator receiving a request for data, if its buffers have such data, the client accelerator transmits the requested data back to the computer- client site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF

configured to be a NDC site.
There is no support that
CacheFlow software and hardware
create an NDC.

NCT has not shown that an accelerator can be an NDC Server Terminator Site. The server terminator site is the owner of the "original data," not a projected image as stated in NCT's chart.

NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers. 007456). Otherwise, if the buffers within the client accelerator do not have the requested data, the client accelerator transmits a request to the CacheFlow 700 accelerator acting as a server terminator site. If the buffers within the CacheFlow 700 accelerator have such data, the server accelerator transmits the requested data back to the client accelerator. If not, the CacheFlow 700 accelerator accesses the server and obtains a copy (i.e., projected image) of the requested data. After obtaining a copy of the requested data, each shared cache, including the CacheFlow 700 accelerator, can subsequently transmit the data to one or more computers within the network.

"The CacheFlow Server Accelerator 700 Series, an integral component of the CacheFlow clQ Content Delivery Architecture, is the only solution specifically built to offload Web servers from content delivery tasks." CF 007490.

"The SA- 700 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver

both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 007491.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447.

"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the

	requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.	
	"The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio and a built-in Secure Sockets Layer (SSL) encryption/ decryption processor. This	
	processor can manage 10 to 40 times more secure sessions than a standard Web server, allowing the SA- 700 to accelerate the delivery of both public (HTTP) and private (HTTPS) content." CF 007491. See also CF 009235.	
	See CF 007493 and 009235 (specifying the different disk drives for each of the three models of the 700 Series accelerators).	
	"The SA- 700's system software, called cIQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235.	
	See CF 007493 and 009235 (specifying the size of the RAM for each of the three models of the 700 Series accelerators).	
(a) an NDC that has an NDC buffer;	A CacheFlow 700 accelerator has a	NCT fails to meet the specificity requirements of L.R. 3-1 for many

	shared cache (NDC)	reasons.
	includes a memory, which comprises a buffer, wherein copies of cached data may be stored and which is checked to determine whether cached data is stored therein. "The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio" CF 007491. See also CF 009235. See CF 007493 and 009235 (specifying the memory size for each of the three models of the 700 Series accelerators).	NCT has not shown that buffers exist within the SA 700. Thus, without identifying any buffer in the SA 700, NCT's chart does not map a buffer within the SA 700 to an NDC buffer. Determining what an NDC buffer includes is a claim construction issue, since an NDC buffer includes a channel, which the SA 700 does not have. Furthermore, NCT asserts that the RAM contained within the SA 700 is the NDC buffer which stores a projected image, however, the RAM does not store cached data, it is a magnetic disk within the SA 700 that caches.
(b) means for the NDC to receive the request to access the dataset;	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the shared cache (NDC) of the CacheFlow 700 accelerator performs the claimed function of receiving a request to access a stored dataset. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to intercept routine 102 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "The SA- 700's system software, called clQ CacheOS™ Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the intercept routine 102 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

		also CF 009235	
		"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	
tc bi tc pi di	c) means for the NDC or check the NDC or check the NDC of check the NDC of check this NDC site or determine if a projected image of lata requested from the dataset is already present there wherein:	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6 The software of the shared cache (NDC) of the CacheFlow 700 accelerator performs the claimed function of checking its memory (NDC buffer) to determine whether the memory has a copy (projected image) of the requested data. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to buffer search routine 126 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "ciQ Server Accelerate and scale web farms by serving up to 95% of	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

	http and https content without taxing backend servers." CF 005965. "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would	
	the content for the web servers." CF 007456. "The SA- 700's system software, called cIQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235. The 700 Series incorporates the same patent-pending CacheOS TM software as in the CA-600 Series.	
	"At a step 213, the leaf cache 111 determines if the web object 133 is present in Its memory or storage 112If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.	
(c)(i) if the NDC buffer of this NDC site does not contain a projected	This claim element is subject to interpretation under 35 U.S.C. § 112,	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS

image of all data requested from the dataset, and if this NDC site is not the NDC server terminator site for the dataset, the NDC including means for transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the dataset than the present NDC site:

¶6.

The software of the shared cache (NDC) CacheFlow 700 accelerator performs the claimed function of transmitting a request for data downstream to another NDC site. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to request director routine 144 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.

"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the request director routine 144 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

(c)(ii) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if this NDC site is the NDC server terminator site for the dataset, the NDC including means for accessing the	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The shared cache (NDC) of the CacheFlow 700 accelerator performs acting as the server accelerator (NDC)	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the file system interface routines112 described in the asserted patents. NCT fails to satisfy the specificity requirements
	a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456. "The SA- 700's system software, called clQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235. The 700 Series incorporates the same patent-pending CacheOS TM software as the CA-600 series. "At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112,because there has been a leaf cache miss At a step 221, similar to step 211, the leaf cache III sends a message to the root cache III requesting the web object 133." CF 000278	
	the web server would otherwise be required to regenerate repeatedlyBy placing	

stored dataset to project an image of the requested data into the buffer if this NDC; and server terminator site) the claimed function of accessing the stored dataset to project an image of the requested data into its memory (NDC buffer). This site incorporates software, the same as or equivalent to file system interface routines 112 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.

"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447. 007447.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate

of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"The SA- 700's system software, called clQ CacheOSTM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235.

The 700 Series incorporates the same patent-pending CacheOSTM software as in the CA-600 Series.

"At a step 223, similar to step 213, the root cache 111 determines if the web object 133 is present in its memory or storage 112. In a preferred embodiment, the root cache 111 makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230.

At a flow point 230, the root cache 111 is unable to transmit the web object 133 from its memory or storage 112 ...because there has a been a root cache miss...

	At a step 231, similar to step 211, the root cache sends a message to the indicated server device 130 requesting the web object 133. At a step 232, the server device 130 transmits the web object 133 to the root cache 111." CFO09278- 009279.	
(c)(iii) if the NDC buffer of an NDC site contains a projected image of all requested data. the NDC including means for returning data requested from it upstream to the NDC site from which it received the request, whereby through a succession of such returns of data from one NDC site to the next upstream NDC site the requested data ultimately arrives at the NDC client terminator site; and	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the shared cache (NDC) of the CacheFlow 700 accelerator performs the claimed function of returning the requested data to the upstream accelerator (NDC site) that requested the data. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to the buffer search routine 126 and client intercept routines 102 or the buffer search routine 126 and server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965. "caches will be deployed across the network. Figure 3 shows a hierarchical	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126, client intercept routines 102, or the buffer search routine 126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

		deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447.	
		"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web	
) data return means	servers." CF 007456. "The SA- 700's system software, called clQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235. This claim element is	NCT makes no showing that the
red the ter	r returning the quested data from e NDC client rminator site to the ent site.	subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the shared cache of the client accelerator (NDC client terminator site) performs the claimed function of returning the requested data to the client site. The	NDC is a shared cache of the SA 700. This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the client intercept routines 102, or the buffer search

		accelerator sites incorporate software, the same as or equivalent to the client intercept routines 102 or server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456. "The SA-700's system software, called clQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235.	routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.
'452 Patent			
Claim 13	A Network Distributed Cache ("NDC") site adapted for inclusion into a network of digital computers, the network including a client terminator site that is adapted for receiving a request from a client for access to data stored in a dataset located at a server terminator site, the server terminator site, the server terminator site also being included in the network and being accessible by the client terminator site via the network, the NDC site comprising:	CacheFlow's manufacture and sales of its 700 accelerators infringes this claim under 35 U.S.C. § 271(a). A CacheFlow 700 accelerator is a Network Distributed Cache ("NDC") site that is adapted for inclusion into its customers' computer networks, such as those operated by internet service providers, broadband service providers, or network provider-such as Akamai. The accelerator is adapted to be included within a computer network-such as those shown in Figure 3 on page CF	NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons. The preamble identifies a network of digital computers, including: An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a SA 700 can be configured to be a NDC site. There is no support that CacheFlow software and hardware create an NDC. NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The SA 700 never stores the "stored data" that is always on the web server. NCT ignores Figures 2 and 3 of

005949, the Figure on CF 005965 to CF 005966, Figure 2 on CF 007446 and Figure 3 on CF 007446-, which in addition to the CacheFlow 700 accelerator comprises a computer acting as client site that requests data from the CacheFlow 700 accelerator. A CacheFlow 700 accelerator includes a processor and a memory (See CF 007493) configured to be an NDC site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 007490 -CF 007493 and CF 009235 to CF 009237 The CacheFlow 700 accelerator further includes computer programs (See CF 007496 and CF 009235), which together with the cache create an NDC. The CacheFlow 700 accelerator is configured such that upon receiving a request for data, the computer programs in the accelerator checks whether the buffers have such data. If so, the accelerator is configured to transmit the requested data back to the requesting computer- client site and/or other NDC site. such as another accelerator (See CF 007456 and CF 007447). Otherwise, if the buffers do not have the requested data, the accelerator is

CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.

NCT misrepresents what the documents they rely on state: CF007493 does not provide a description of a processor or memory within a SA 700.

CF007490-3 does not show the memory of the SA 700 being allocated as a cache.

configured to access such data from a downstream NDC site, such as another accelerator, or from an accelerator acting as an NDC server terminator site (See CF 007456 and CF 007447).

"The CacheFlow Server Accelerator 700 Series, an integral component of the CacheFlow clQTM Content Delivery Architecture, is the only solution specifically built to offload Web servers from content delivery tasks." CF 007490.

"The SA- 700 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers. The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 007491.

"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly. ..By placing a server accelerator in

front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

- "...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447.
- " An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.

"The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio and a built-in Secure Sockets Layer (SSL) encryption/ decryption processor. This processor can manage 10 to 40 times more secure sessions than a standard Web server,

(a) an NDC having on	allowing the SA- 700 to accelerate the delivery of both public (HTTP) and private (HTTPS) content." CF p07491. See a/so CF 009235. See CF 007493 and 009235 (specifying the different disk drives for each of the three models of the 700 Series accelerators). See CF 007493 and 009235 (specifying the size of the RAM for each of the three models of the 700 Series accelerators).	NCT fails to most the appoints:
(a) an NDC having an NDC buffer and including;	A CacheFlow 700 - accelerator has an NDC that includes a memory, which comprises a buffer, wherein copies of cached data may be stored and which is checked to determine whether cached data is stored therein. "The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio" CF 007491. See also CF 009235. See CF 007493 and 009235 (specifying the memory size for each of the three models of the 700 Series accelerators).	NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons. NCT has not shown that buffers exist within the SA 700. Thus, without identifying any buffer in the SA 700, NCT's chart does not map a buffer within the SA 700 to an NDC buffer. Determining what an NDC buffer includes is a claim construction issue, since an NDC buffer includes a channel, which the SA 700 does not have. Furthermore, NCT asserts that the RAM contained within the SA 700 is the NDC buffer which stores a projected image, however, the RAM does not store cached data, it is a magnetic disk within the SA 700 that caches.
(a)(i) means for receiving requests for access to data stored in a dataset; and	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the NDC of the CacheFlow 700 accelerator	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the intercept routine

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	performs the claimed function of receiving a request to access a stored dataset. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to intercept routine 102 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "The SA- 700's system software, called clQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235. "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers	102 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.
(a)(ii) means for the NDC to check the NDC buffer to determine when a projected image of valid data	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "manna" stated in the apparted.
responsive to at least a portion of requests therefor is already present in the NDC	The software of the NDC of the CacheFlow 700 accelerator performs the claimed	the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126 described in the

buffer wherein:

function of checking its memory (NDC buffer) to determine whether the memory has a copy (projected image) of the requested data. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to buffer search routine 126 disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.

"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.

"A reverse proxy or server accelerator. such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"The SA- 700's system software, called clQ CacheOS™ Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235.

asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

	The 700 Series incorporates the same patent-pending CacheOS TM software as in the CA-600 Series. "At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112If the web object 133 is present, the method 200 proceeds with the next step." CF	
	009278.	
(a)(ii)(A) if the NDC buffer does not contain a projected image of all data requested from the dataset, and if the NDC site is not the server terminator site for the dataset, the NDC including means for transmitting a request for data via the network from the NDC site downstream to another site closer to the server terminator site for the dataset than the NDC site;	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the NDC CacheFlow 700 accelerator performs the claimed function of transmitting a request for data downstream to another NDC site. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to request director routine 144 as disclosed in U.S. Patent No. 5,611,049, for perforn1ing this claimed function.	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the request director routine 144 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.
	"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.	
	"caches will be deployed across the network. Figure 3 shows a hierarchical deployment of	

CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447. central site." CF 007472. See also CF 007447. "A reverse proxy or server accelerator. such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"The SA- 700's system software, called clQ CacheOSTM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See a/so CF 009235.

The 700 Series incorporates the same patent-pending CacheOSTM software as the CA-600 series.

"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112, ...because there

	has been a leaf cache miss At a step 221, similar to step 211, the leaf cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.	
(a)(ii)(B) if the NDC buffer does not contain a projected image of all data requested from the dataset, and if the NDC site is the server terminator site for the dataset, the NDC including means for accessing the dataset to project a valid image of the requested data into the NDC buffer;	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. When the CacheFlow 700 accelerator is the server accelerator (NDC server terminator site), the software of the NDC of the CacheFlow 700 accelerator performs the claimed function of accessing the stored dataset to project an image of the requested data into its memory (NDC buffer). This site incorporates software, the same as or equivalent to file system interface routines 112 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965. " caches will be deployed across the network. Figure 3 shows a hierarchical	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the file system interface routines112 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See a/so CF 007447.

"A reverse proxy or server accelerator. such as a CacheFlow Server - Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"The SA- 700's system software, called clQ CacheOSTM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See a/so CF 009235.

The 700 Series incorporates the same patent-pending CacheOSTM software as in the CA-600 Series.

"At a step 223, similar to step 213, the root cache 111 determines if the web object 133 is present in its memory or storage 112. In a

	preferred embodiment, the root cache 111 makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230. At a flow point 230, the root cache 111 is	
	unable to transmit the web object 133 from its memory or storage 112because there has a been a root cache miss At a step 231, similar to step 211, the root	
	cache sends a message to the indicated server device 130 requesting the web object 133.	
	At a step 232, the server device 130 transmits the web object 133 to the root cache III." CF 009278- 009279.	
(a)(ii)(C) if the NDC buffer contains a projected image of all requested data, and if the NDC site is not the client terminator site which received the request from the client, the NDC including means for returning data requested from the NDC site upstream to the site from which the NDC received the	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. The software of the NDC of the CacheFlow 700 accelerator performs the claimed function of returning the requested data to the upstream accelerator (NDC site) that requested the	This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126, client intercept routines 102, or the buffer search routine 126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements

request, whereby through a succession of such returns of data from one site to the next upstream site the requested data ultimately arrives at the client terminator site; and data. The CacheFlow 700 accelerator incorporates software, the same as or equivalent to the buffer search routine 126 and client intercept routines 102 or the buffer search routine 126 and server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.

"ciQ Server Accelerators accelerate and scale web farms by serving up to 95% of http and https content without taxing backend servers." CF 005965.

- "...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See also CF 007447.
- " A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in

of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

	front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456. "The SA- 700's system software, called clQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See a/so CF 009235.	
(a)(ii)(D) if the NDC buffer contains a valid projected image of all requested data, and if the NDC site is the client terminator site which received the request from the client, the NDC including data return means for returning the requested data from the NDC buffer to the client site.	This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6. If the CacheF1ow 700 accelerator is the client accelerator (NDC client terminator site), the software of the NDC of the CacheFlow 700 accelerator performs the claimed function of returning the requested data to the client site. The accelerator sites incorporate software, the same as or equivalent to the client intercept routines 102 or server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function. "By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456. "The SA- 700's system software, called cIQ CacheOS™ Server Edition, is expressly tuned for the workload of a high-traffic Web	NCT makes no showing that the NDC is a shared cache of the SA 700. This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the client intercept routines 102, or the buffer search routine126, and server interface routines 104,, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.

		site." CF 007491. See	
		a/so CF 009235.	
'234 Patent			
'234 Patent Claim 1	A network- infrastructure cache for providing proxy services to a plurality of client workstations concurrently requesting access to data stored on a server; the client workstations and the server being interconnected by a network via which client workstations may transmit network-file- services-protocol requests to the server, and via which the server transmits network-file-services- protocol responses to requesting client workstations; the network- infrastructure cache comprising:	CacheFlow's manufacture and sales of its 700 accelerators infringes this claim under 35 U.S.C. § 271(a). A CacheFlow 700 accelerator includes hardware (See CF 007493 and CF 009235 to CF 009237) and software (See CF 007492 and CF 009235) configured to be a network-infrastructure cache ("NI Cache"). The hardware includes memory (See CF 007493 and CF 009237), a portion of which serves as a cache (See CF 007493) that stores cached data. The software of the accelerator configures the cache to be a proxy cache (NI cache) (See CF 007456) for a plurality of client workstations-as illustrated in Figure 3 on page CF 005949, the Figure on CF 005965 to CF 005966 and Figure 3 on CF 007447. The CacheFlow 700 accelerator is configured such that upon receiving a request for data, in a network-file-services protocol (See CF 007492 and CF 009235), from a computer such as a client workstation, the	

the accelerator

check whether the proxy cache has a copy of the requested data. If so, the CacheFlow 700 accelerator is configured to transmit the requested data back to the computer that requested it (See CF 007456). Otherwise, if the proxy cache does not have the requested data, the accelerator is configured to transmit a network-file- services protocol request for the requested data missing from the proxy cache, via the network, to a server (See CF 007456). The accelerator is also configured to receive a network-file-services protocol response via the network, wherein the response includes the missing data (See CF 007456). The accelerator is also configured to store such data in the proxy cache (See CF 007456).

"The CacheFlow Server Accelerator 700 Series, an integral component of the CacheFlow clQ Content Delivery Architecture, is the only solution specifically built to offload Web servers from content delivery tasks." CF 007490.

"The SA- 700 services up to 95% of a site's inbound requests, delivering content directly to users and - offloading Web servers.

The server accelerator will deliver both public (HTTP) and private (HTTPS) content, whether that content is static or dynamic in nature." CF 007491.

"A reverse proxy or server accelerator. such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users. Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedly...By placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.

"...caches will be deployed across the network. Figure 3 shows a hierarchical deployment of CacheFlow products, beginning with the POPs closest to the users and working upstream though aggregation sites to the provider's central site." CF 007472. See a/so CF 007447.

"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a

cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is riot in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.

"The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAMto-disk ratio and a builtin Secure Sockets Layer (SSL) encryption/ decryption processor. This processor can manage 10 to 40 times more secure sessions than a standard Web server, allowing the SA-700 to accelerate the delivery of both public (HTTP) and private (HTTPS) content." CF 007491. See a/so CF 009235. See CF 007493 and 009235 (specifying the different disk drives for each of the three models of the 700 Series accelerators).

"The SA- 700's system software, called clQ CacheOS[™] Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See a/so CF 009235.

See CF 007493 and 009235 (specifying the size of the RAM for each of the three models of the 700

	Series accelerators).	
a network interface that connects to the network for providing a hardware and software interface to the network through which the network-infrastructure cache receives and responds to network-file-services-protocol requests from client workstations for data for which the network-infrastructure cache provides proxy services;	The CacheFlow 700 accelerator includes hardware and software, and the hardware includes a memory, a portion of which serves as a cache for storing cached data. The software configures the cache to be a proxy cache for a plurality of workstations such that the cache may be checked to determine if cached data is present. The hardware and software of the proxy cache include an interface, the same as or equivalent to network interface 102, that allows it to receive and respond to network-file- protocol requests from a plurality of client workstations. "A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache Server Accelerators serve up content that the web server would otherwise be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456.	NCT has not provided a single authority to support this allegation. NCT has not identified a structure that is a network interface within the SA 700.
	"The SA- 700 hardware is optimized for Web server acceleration,allowing the SA- 700 to accelerate the delivery of both public (HTTP) and private (HTTPS)	

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	content." CF 007491. See also CF 009235.	
	"The SA- 700 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers." CF 007491.	
	"The SA- 700's system software, called clQ CacheOSTM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235.	
	The 700 Series incorporates the same patent-pending CacheOS TM software as the CA-600 series.	
	"At a step 211, one of the client devices 120 sends a message to its associated leaf cache III requesting a selected web object 133." CF 009277.	
a file-request service- module for receiving via said network interface network -file- services-protocol requests transmitted by the client workstations for data for which the network- infrastructure cache provides proxy services, and for transmitting to client workstations via said network file pageiges	A CacheFlow 700 accelerator includes software, the same as or equivalent to the service- module 112, for receiving network- file-services- protocol requests from and for transmitting network interface network-file- services-protocol responses to client workstations.	NCT has not provided a single authority to support this allegation. NCT has not identified a structure within the file-request service module within the SA 700.
network -file- services- protocol responses to the network-file- services- protocol requests;	"A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache Server Accelerators serve up content that the web server would otherwise	

	be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers or web site, the accelerator will serve the content for the web servers." CF 007456. "The SA- 700 hardware is optimized for Web server acceleration,allowing the SA- 700 to accelerate the delivery of both public (HTTP) and private (HTTPS) content." CF	
	"The SA- 700 services up to 95% of a site's inbound requests, delivering content directly to users and offloading Web servers." CF 007491.	
	"The SA- 700's system software, called clQ CacheOS TM Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See a/so CF 009235.	
	The 700 Series incorporates the same patent-pending CacheOS TM software as the CA-600 series.	
	"At a step 211, one of the client devices 120 sends a message to its associated leaf cache 111 requesting a selected web object 133." CF 009277.	
a cache from which said file- request service-module retrieves data that is	The CacheFlow 700 accelerator includes hardware and software, and the hardware	NCT has not provided a single authority to support this allegation. NCT has not identified a structure that is a network interface within

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included in the network-file-services-protocol responses that said file-request service-module transmits to the client workstations; and	includes memory, a portion of which serves as a cache, that stores cached data. The software configures the cache to be a proxy cache for a plurality of workstations. " A reverse proxy or server accelerator, such as a CacheFlow Server Accelerator, is a shared cache that web content providers install close to web servers to accelerate delivery of content to the Internet users." CF 007456. "caches will be deployed across the network." CF 007472. See also CF 007447.	the SA 700.
a file-request generation- module for transmitting to the server via said network interface network-file-services-protocol requests for data specified in network-file- services-protocol requests received by said file-request service-module that is missing from said cache, for receiving from the server network-file- services-protocol responses that include data missing from said cache, and for transmitting such missing data to said cache for storage therein.	The CacheF1ow 700 accelerator includes software, the same as or equivalent to the request- module 132, for transmitting a network-file- services-protocol request for data. missing from the cache, to a downstream accelerator or the server, for receiving the missing data, and for transmitting the missing data to the cache. "A reverse proxy or server accelerator, such as a CacheFlow Server Acceleratorserve[s] up content that the web server would otherwise be required to regenerate repeatedlyBy placing a server accelerator in front of the web servers	NCT has not provided a single authority to support this allegation. NCT has not identified a structure that is a network interface within the SA 700.

or web site, the accelerator will serve the content for the web servers." CF 007456.

"The SA- 700 services up to 95% of a site's inbound requests, delivering content directly to users..." CF 007491.

"The SA- 700's system software, called cIQ CacheOS™ Server Edition, is expressly tuned for the workload of a high-traffic Web site." CF 007491. See also CF 009235.

The 700 Series incorporates the same patent-pending CacheOSTM software as the CA-600 series.

"If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230.

At a flow point 230, the root cache 111 is unable to transmit the web object 133 from its memory or storage 112 ...because there has a been a root cache miss...

At a step 231, similar to step 211, the root cache sends a message to the indicated server device 130 requesting the web object 133.

At a step 232, the server device 130 transmits the web

		object 133 to the root cache 111." CF 009278- 009279.	
Claim 2	The network-infrastructure cache of claim 1 wherein client workstations transmit network-file-services-protocol requests using Hyper-Text Transfer Protocol ("HTTP").	The client workstations transmit network-file-services-protocol requests to the CacheFlow 700 accelerator using Hyper- Text Transfer Protocol ("HTTP")	NCT has not shown that the SA 700 is a client workstation that transmits requests using HTTP.
		"The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio and a built-in Secure Sockets Layer (SSL) encryption/ decryption processor. This processor can manage 10 to 40 times more secure sessions than a standard Web server, allowing the SA- 700 to accelerate the delivery of both public (HTTP) and private (HTTPS) content." CF 007491. See also CF 009235. "Can accelerate both public (HTTP) and private (HTTPS) content through integrated SSL functionality," CF 007492.	
Claim 3	3. The network- infrastructure cache of claim 1 wherein the server transmits network-file- services- protocol responses	The server transmits network-file-services-protocol responses to the CacheFlow 700 accelerator using HTTP.	NCT has not shown that the SA 700 is a server that transmits responses using HTTP.
	using HTTP.	"The SA- 700 hardware is optimized for Web server acceleration, featuring a high RAM-to-disk ratio and a built-in Secure Sockets	

Layer (SSL) encryption/ decryption	
processor. This	
processor i can	
manage 10 to 40 times	
more secure sessions	
than a standard Web	
server, allowing the SA- 700 to accelerate	
the delivery of both	
public (HTTP) and	
private (HTTPS)	
content." CF 007491.	
See a/so CF 009235.	
"Can accelerate both	
public (HTTP) and	
private (HTTPS)	
content through	
integrated SSL	
functionality." CF	
007492	